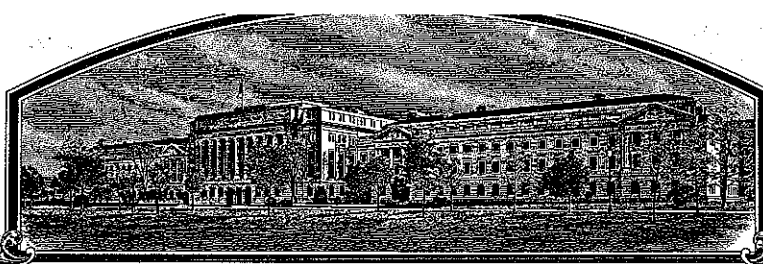


No.

200600224



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Syngenta Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, FIELD

'Beryl R'

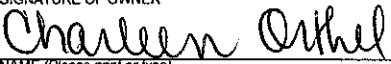
In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifteenth day of June, in the year two thousand and seven.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE <i>(Instructions and information collection burden statement on reverse)</i>		The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995. Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).	
1. NAME OF OWNER Syngenta Seeds, Inc.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME ROG689	3. VARIETY NAME Beryl R
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 600 N. Armstrong Place Boise, ID 83704		5. TELEPHONE (include area code) 208-322-7272	FOR OFFICIAL USE ONLY PVPO NUMBER <div style="font-size: 2em; font-weight: bold;">200600224</div> FILING DATE <div style="font-size: 1.5em; font-weight: bold;">MAY 23, 2006</div>
		6. FAX (include area code) 208-327-9319	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation	8. IF INCORPORATED, GIVE STATE OF INCORPORATION DE	9. DATE OF INCORPORATION February 25, 1975	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Charleen Orthel Syngenta Seeds, Inc. - Vegetables 600 N. Armstrong Place P.O. Box 4188 Boise, ID 83704 MAY 5/26/2007 </div> <div style="width: 45%;"> Kim Briggs 6338 Highway 20-26 Nampa ID 83687 </div> </div>		FILING AND EXAMINATION FEES: \$ 4,382.00 DATE 5/23/06 CERTIFICATION FEE: \$ 768.00 DATE 6/05/2007	
		F E E S R E C E I V E D	
11. TELEPHONE (include area code) 208-327-7246 465-8522	12. FAX (include area code) 208-327-9319 467-4559	13. E-MAIL Kim.Briggs@syngenta.com	
14. CROP KIND (Common Name) Field Bean	16. FAMILY NAME (Botanical) Leguminosae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP Phaseolus vulgaris	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Exhibit F. Declaration Regarding Deposit g. <input type="checkbox"/> Voucher Sample (3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) h. <input checked="" type="checkbox"/> Filing and Examination Fee (\$4,382), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED <input type="checkbox"/> <i>(If additional explanation is necessary, please use the space indicated on the reverse.)</i>	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) Charleen Orthel		NAME (Please print or type)	
CAPACITY OR TITLE Registration Specialist	DATE 22 May 2006	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filing fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). **NEW:** With the application for a seed reproduced variety or by direct deposit soon after filing, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

Plant Variety Protection Office
Telephone: (301) 504-5518 **FAX:** (301) 504-5291
General E-mail: PVPOmail@usda.gov **Homepage:** <http://www.ams.usda.gov/science/pvpo/PVPindex.htm>

200600224

SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870.

<http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) evidence of uniformity and stability; and (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively; (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

USA April 2003 Regional Field Trial in Minnesota, to gather data on disease resistance, yield, seed quality.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Field Bean Great Northern

'ROG689'

Exhibit A

Origin and Breeding History

The objective in the development of Syngenta Seeds, Inc. 'ROG689' in the Great Northern market class of field beans was to transfer the Ur11 rust gene from the donor parent 'BelMiNeb-RMR-3' into Syngenta Seeds, Inc. variety 'Beryl' using the backcrossing breeding method. 'ROG689' was derived from a series of five backcrosses with 'Beryl' as the recurrent parent.

<u>Year</u>	<u>Gen.</u>	<u>Plot #</u>	<u>Bulk lbs.</u>	<u># of SPS</u>	<u>Selection Criteria</u>
1999	BC5F1	99-GH-7008-3			
1999	BC5F2	99-DB-0119		4	SPS's based on pod load, plant architecture, maturity, seed size, and seed quality.
2000	BC5F3	00-DB-1084		2	SPS's based on pod load, plant architecture, maturity, seed size, and seed quality.
2000	BC5F4	00-DB-0134	2.7		Bulk, evaluation based on above characteristics
2000	BC5F5	00-GH-1009			
2001	BC5F6	01-GH-1009			
2001	BC5F7	QD1711	188		
2002	BC5F8	ND2885A	9,684		

ROG689 has been observed to be uniform and stable since the BC5F5 generation and has remained uniform and stable through the BC5F8 generation. Stock QD1711 was increased to commercial size quantities. Seed stock will be monitored for purity. No variants have been observed since the F5 generation.

Field Bean Great Northern

'ROG689'

Exhibit B

Novelty Statement

Syngenta Seeds, Inc. variety 'ROG689' is most like the variety 'Beryl', but differs in the following way:

'ROG689' has the Ur11 rust gene from the donor parent 'BelMiNeb-RMR-3'; 'Beryl' does not. This gene gives 'ROG689' resistance to all known strains of bean rust, except race 108, whereas 'Beryl' has no resistance to rust (see Beryl PVP application for supporting material).

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

Exhibit C

**OBJECTIVE DESCRIPTION OF VARIETY
Field Bean (*Phaseolus vulgaris* L.)**

NAME OF APPLICANT (S) Syngenta Seeds, Inc.	TEMPORARY OR EXPERIMENTAL DESIGNATION ROG689	VARIETY NAME Beryl R
ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country) 600 N. Armstrong Place Boise, ID 83704		FOR OFFICIAL USE ONLY PVPO NUMBER 200600224

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Provide data for all characters unless indicated as "optional". Place numbers in the boxes for the characters or numerical values that best describe this variety. Measured data should be the mean of an appropriate number of well spaced (15-20 cm) plants. The Royal Horticultural Society or any recognized color standard may be used to determine plant color. Designate the color system used below.

COLOR SYSTEM USED:	LOCATION OF THE TEST(S) TO EVALUATE THIS VARIETY: Twin Falls, ID																																							
1. MARKET CLASS: <table border="0"> <tr> <td><input type="text" value="0"/> <input type="text" value="5"/></td> <td>CLASS</td> <td>CHECK</td> </tr> <tr> <td></td> <td>1 = Navy (Pea)</td> <td>Seafarer</td> </tr> <tr> <td></td> <td>2 = Small White</td> <td>Aurora</td> </tr> <tr> <td></td> <td>3 = Black</td> <td>Midnight</td> </tr> <tr> <td></td> <td>4 = Pinto</td> <td>UI-114</td> </tr> <tr> <td></td> <td>5 = Great Northern</td> <td>UI-59</td> </tr> <tr> <td></td> <td>6 = Small Red</td> <td>NW-59</td> </tr> <tr> <td></td> <td>7 = Pink</td> <td>Viva</td> </tr> <tr> <td></td> <td>8 = Cranberry</td> <td>UI-50</td> </tr> <tr> <td></td> <td>9 = Dark Red Kidney</td> <td>Montclair</td> </tr> <tr> <td></td> <td>10 = Light Red Kidney</td> <td>Redcloud</td> </tr> <tr> <td></td> <td>11 = Yellow Eye</td> <td>Steuben</td> </tr> <tr> <td></td> <td>12 = Other (Specify _____)</td> <td></td> </tr> </table>	<input type="text" value="0"/> <input type="text" value="5"/>	CLASS	CHECK		1 = Navy (Pea)	Seafarer		2 = Small White	Aurora		3 = Black	Midnight		4 = Pinto	UI-114		5 = Great Northern	UI-59		6 = Small Red	NW-59		7 = Pink	Viva		8 = Cranberry	UI-50		9 = Dark Red Kidney	Montclair		10 = Light Red Kidney	Redcloud		11 = Yellow Eye	Steuben		12 = Other (Specify _____)		2 = MATURITY: <input type="text" value="1"/> 1 = Early (80-90 days) 2 = Medium (90-100 Days) 3 = Late (> 100 Days) <input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="1"/> Days from Planting to Harvest Maturity <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> Heat Units from Planting to Harvest Maturity (Optional). Specify Base Temperature Used: _____ <input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="2"/> Days from Planting to Harvest Maturity of Check Variety (Use Check Appropriate to Market Class Shown in Item 1)
<input type="text" value="0"/> <input type="text" value="5"/>	CLASS	CHECK																																						
	1 = Navy (Pea)	Seafarer																																						
	2 = Small White	Aurora																																						
	3 = Black	Midnight																																						
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	10 = Light Red Kidney	Redcloud																																						
	11 = Yellow Eye	Steuben																																						
	12 = Other (Specify _____)																																							

3. PLANT HABIT:

TYPE <input type="radio"/> 1 = Ia Bush-determinate, Strong and Erect Stem and Branches <input type="radio"/> 2 = Ib Bush-determinate, Weak Stem and Branches <input type="radio"/> 3 = IIa Erect Growth Habit-indeterminate, Guides (Runners) short or not developed <input type="radio"/> 4 = IIb Erect Growth Habit-indeterminate, Guides Medium to Long, with no Ability to Climb <input checked="" type="radio"/> 5 = IIIa Vine-indeterminate, Short Guides with no ability to Climb <input type="radio"/> 6 = IIIb Vine-indeterminate, Long Guides with Ability to Climb <input type="radio"/> 7 = IVa Indeterminate Climbing, Pods Distributed Throughout the Plant <input type="radio"/> 8 = IVb Indeterminate Climbing, Pods Concentrated on the Upper Part of the Plant	<input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="9"/> Average Height of Mature Plant, in cm. <input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="8"/> Average Height of Check Variety, in cm. (Use Same Check as Above) <input type="text" value="3"/> Pod Position: 1 = Low (Lower Pods Touching Soil Surface) 2 = High (Lower Pods not Touching Soil Surface) 3 = Scattered (Not Concentrated High or Low) <input type="text" value="2"/> Adaptability to Machine Harvest: 1 = Adapted 2 = Not Adapted <input type="text" value="2"/> Lodging Resistance: 1 = Good 2 = Fair 3 = Poor
---	--

5

4. LEAFLET MORPHOLOGY: (Use terminal Leaflet of a Fully Expanded Trifoliate)

2 1 = Smooth 2 = Wrinkled 3 1 = Dull 2 = Glossy 3 = Semiglossy 4 = Variable

Shape: 1 = Ovate 2 = Lanceolate 3 = Deltoid 4 = Cordate 5 = Rhomboid

Apex of Leaflet: 1 = Acute 2 = Acuminate 3 = Cuspidate 4 = Obtuse

Base of Leaflet: 1 = Obtuse 2 = Oblique 3 = Cordate 4 = Cuneate 5 = Attenuate

5. FLOWER COLOR AND DAYS TO BLOOM:

1 Color of Standard: 1 = White 2 = Cream 3 = Pink 4 = Blue 5 = Purple

1 Color of Keel: 1 = White 2 = Cream 3 = Pink 4 = Blue 5 = Purple

1 Color of Wings: 1 = White 2 = Cream 3 = Pink 4 = Blue 5 = Purple

4 2 Days to 50% Bloom

6. POD MORPHOLOGY: (Green Pod Morphology Optional)

Green Mature

1 1 Color Pattern: 1 = Solid 2 = Striped 3 = Blotched 4 = Mottled 5 = Other

3 5 Primary Color: 1 = Purple 2 = Red 3 = Green 4 = Yellow 5 = Tan 6 = Brown 7 = Other

3 3 Color Modifier: 1 = Light 2 = Light Medium 3 = Medium 4 = Medium Dark 5 = Dark

2 1 Secondary Color: 1 = Purple 2 = Red 3 = Green 4 = Yellow 5 = Tan 6 = Brown 7 = Other

2 1 Cross Section Shape: 1 = Flat 2 = Pear 3 = Round 4 = Figure Eight

2 2 Pod Curvature: 1 = Straight 2 = Slightly Curved 3 = Curved 4 = Recurved

3 3 Pod Beak Orientation: 1 = Straight 2 = Curved Upward 3 = Curved Downward 4 = Variable

2 2 Constrictions: 1 = None 2 = Slight 3 = Deep

4 7 Average Number of Seeds per Pod

Average Beak Length, in cm. .79

7. SEED COLOR:

1 = Shiny 2 = Dull 3 = Semishiny 4 = Variable 1 = Monochrome 2 = Polychrome

Primary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other

Secondary Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other

Color Pattern: 1 = Solid 2 = Splashed 3 = Mottled 4 = Striped 5 = Flecked 6 = Dotted

Hilar Ring: 1 = Absent 2 = Present

Hilar Ring Color: 1 = White 2 = Yellow 3 = Buff 4 = Tan 5 = Brown 6 = Pink 7 = Red 8 = Purple 9 = Blue 10 = Black 11 = Other

8. SEED SHAPE AND WEIGHT:

3 Shape of Seed Taken From Middle of Pod: 1 = Round 2 = Oval 3 = Cuboid 4 = Kidney 5 = Truncate Fastigate

2 9 Dry Seed Weight in g/100g Seeds (Adjusted to 12% Moisture)

9. ANTHOCYANIN PIGMENTATION:

Flowers 1 = Absent 2 = Present

Leaves 1 = Absent 2 = Present

Stems 1 = Absent 2 = Present

Petioles 1 = Absent 2 = Present

Pods Seeds 1 = Absent 2 = Present

Peduncles 1 = Absent 2 = Present

Nodes 1 = Absent 2 = Present

10. KNOWN DISEASE REACTION:

DISEASES - COMMON NAME: Anthracnose, Rust, Powdery Mildew, Fusarium Root Rot, Pythium Root Rot, Rhizoctonia Root Rot, Pythium Wilt, Sclerotinia White Mold, angular Leaf Spot, Bacterial Wilt, Halo Blight, Fuscous Blight, Common Bacterial Blight, Red Node Virus, Pod Mottle Virus, Bean Common Mosaic Virus, Bean Yellow Mosaic Virus, Curly Top Virus, Bacterial Brown Spot, Bean Southern Mosaic Virus, Other (Specify)

Reaction: 1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

(Give the Common Name (CN), Scientific Name (SN), and Race(s), Where Applicable)

2 Disease: CN Rust; SN _____; Race(s) All known races except 108;

2 Disease: CN Bean Common Mosaic Virus; SN _____; Race(s) Races controlled by the "I" gene;

Disease: CN _____; SN _____; Race(s) _____;

Disease: CN _____; SN _____; Race(s) _____;

Disease: CN _____; SN _____; Race(s) _____;

Disease: CN _____; SN _____; Race(s) _____;

11. KNOWN INSECT/NEMATODE RESISTANCE:

PESTS - COMMON NAME: Aphids, Bean Pod Weevil, Bruchid Beetle, Corn Earworm, Flea Beetle, Leaf Hopper, Lesion Nematode, Lygus, Mexican Bean Beetle, Root Knot Nematode, Corn Seed Maggot, Spider Mites, Thrips, Weevils, Western Bean Cutworm, Other (Specify)

Reaction: 1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

(Give the Common Name (CN), Scientific Name (SN), and Race(s), Where Applicable)

Pest: CN _____; SN _____; Race(s) _____;

Pest: CN _____; SN _____; Race(s) _____;

Pest: CN _____; SN _____; Race(s) _____;

12. KNOWN PHYSIOLOGICAL STRESS REACTION:

1 = Susceptible 2 = Resistant 3 = Tolerant 4 = Avoidance

Heat Cold Drought Air Pollution

13. COMMENTS:

200600224

ROG689 (Beryl R) has the Ur11 gene for rust resistance. ROG689 (Beryl R) carries the "I" gene for bean common mosaic virus resistance.

Field Bean Great Northern

'ROG689'

Exhibit D

Botanical Description

Field bean great northern 'ROG689' is an early season variety that matures in 81 days in Idaho. It has a short vine plant habit (type IIIa, CIAT classification) and flowers in 42 days. It has fair lodging resistance and a scattered pod set.

The leaves are wrinkled, dull, ovate with acuminate apices, and mostly obtuse leaf bases.

Flowers are white, and pods are green which turn tan at maturity.

ROG689 has an average of 4.7 seeds per pod and an average seed size of 29 grams per 100 seeds.

ROG689 carries the "I" gene, which confers resistance to Bean Common Mosaic Virus.

ROG689 carries the Ur11 gene, which confers resistance to all known races of Bean Rust except race 108.

ROG689 is adapted to the growing areas of Idaho, Nebraska, and Colorado.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE**EXHIBIT E**
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Syngenta Seeds, Inc.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER ROG689	3. VARIETY NAME Beryl R
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 600 N. Armstrong Place Boise, ID 83704	5. TELEPHONE (Include area code) (208) 322-7272	6. FAX (Include area code) (208) 327-9319
7. PVPO NUMBER		200600224

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.

☒

YES

☐

NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.

☒

YES

☐

NO

10. Is the applicant the original owner?

☒

YES

☐

NO

If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐

YES

☐

NO

If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐

YES

☐

NO

If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Field bean 'ROG689' was bred and developed by plant breeders employed by Syngenta Seeds. By agreement between the employee and Syngenta Seeds, all rights to any invention, discovery or development made by the employee while employed by Syngenta Seeds were assigned to Syngenta Seeds, with no rights retained by the employee.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT F
DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S) Syngenta Seeds, Inc.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 600 N. Armstrong Place Boise, ID 83704	TEMPORARY OR EXPERIMENTAL DESIGNATION ROG689
NAME OF OWNER REPRESENTATIVE (S) Charleen Orthel Syngenta Seeds, Inc.	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 600 N. Armstrong Place Boise, ID 83704	VARIETY NAME Beryl R <hr/> FOR OFFICIAL USE ONLY <hr/> PVPO NUMBER 200600224

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Charleen Orthel
Signature

22 May 2006
Date

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